University of California, Berkeley
Physics H7C, Fall 1999 (Strovink)

General Information (27 Aug 99)

Web site for this class: First link on `http://d0lbln.lbl.gov .`

Instructors: Prof. **Mark Strovink**, 437 LeConte; (LBL) 486-7087; (home, before 10) 486-8079; (UC) 642-9685. Email: `strovink@lbl.gov .` Web: `http://d0lbln.lbl.gov .` Office hours: M 3:15-4:15, 5:30-6:30. Mr. **Derek Kimball**, (UC research lab) 221 Birge, 643-1829; (home, before 11) 548-3115. Email: `dfk@uclink4.berkeley.edu .` Office hours (to be held in 211 LeConte): Tu 2-4. You may also get help in the 7C Course Center, 262 LeConte.

Lectures: Tu-Th 11:10-12:30, 3 LeConte. Lecture attendance is essential, since not all of the course content can be found in the course text or handouts. On one or two occasions it is possible that the lecture normally held on Thursday will be given instead on Wednesday, at 4:30-5:50 PM, in 343 LeConte.

Labs: Begin in the third week, in 278 LeConte. As soon as possible, please enroll in any one of the 7C lab sections that fits your schedule.

Discussion Sections: Begin in the second week. **Section 1**: W 4-5, 343 LeConte; **Section 2**: W 5:30-6:30, also in 343 LeConte. You are welcome at either or both sections. You are especially encouraged to attend discussion section regularly. There you will learn techniques of problem solving, with particular application to the assigned exercises.

Texts (required): Fowles, **Introduction to Modern Optics**, *Second Edition* (Dover paperback, 1989). Rohlf, **Modern Physics from α to Z^0** (Wiley, 1994). **Supplementary text** (recommended): Hecht, **Schaum's Outline of Theory and Problems of Optics** (McGraw-Hill paperback, 1975). (Don't confuse this with Hecht's hardbound books on optics.)

Problem Sets: Twelve problem sets are assigned and graded. Solutions will be available. Problem sets are due on Thursday at 5 PM on weeks in which there is no exam, beginning in week 2. Deposit problem sets in the box labeled "H7C" outside 211 LeConte. You are encouraged to attempt all the problems. Students who do not do them find it almost impossible to learn the material and to succeed on the examinations. Discuss these problems with your classmates as well as with the teaching staff; however, when the time comes to write up your solutions, *work independently*. Credit for collective writeups, which are easy to identify, will be divided among the collectivists. Late papers will not be graded. Your lowest problem set score will be dropped, in lieu of due date extensions for any reason.

Syllabus: H7C has one mandatory syllabus card. It will be collected when the first midterm examination is handed back in lecture. This card pays for the 7C laboratory experiment descriptions and instructions. Copies of solutions to each problem set will also be available for separate purchase at Copy Central.

Exams: There will be two 80-minute midterm examinations and one 3-hour final examination. Before confirming your enrollment in this class, please check that its final Exam Group 9 does not conflict with the Exam Group for any other class in which you are enrolled. Please verify that you will be available for the midterm examinations (Th 7 Oct and Th 11 Nov, 11:10-12:30), and for the final examination, F 10 Dec, 5-8 PM. Except for unforeseeable emergencies, it will not be possible for the midterm or final exams to be rescheduled. Passing H7C requires passing the final exam.

Grading: 30% midterms; 25% problem sets; 40% final exam; 5% lab. Grading is not "curved" -- it does not depend on your performance relative to that of your H7C classmates. Rather it is based on comparing your work to that of a generation of earlier lower division Berkeley physics students, with due allowance for educational trends.